WHAT IS CLAIMED IS:

1. A method, comprising:

identifying a first header portion and a second header portion of a packet header

5   for an information packet;

storing the first header portion and the second header portion;

checking if the first header portion has a first pre-determined relationship to a first stored pattern associated with the first header portion; and

checking if the second header portion has a second pre-determined relationship to

10   a second stored pattern associated with the second header portion.

2. The method of claim 1, wherein a plurality of pre-determined relationships and stored patterns are associated with the first header portion.

15   3. The method of claim 2, wherein the pre-determined relationships associated with the first header portion indicate that the first header portion should not equal any of the stored patterns associated with the first header portion.

4. The method of claim 3, wherein the stored patterns associated with the first

20   header portion are stored in a content addressable memory unit.

5. The method of claim 4, wherein the first header portion check is performed simultaneously for all of the stored header patterns that are associated with the first header portion by providing the first header portion to the content addressable memory

25   unit.

6. The method of claim 1, further comprising:

generating an indication that the information packet has an invalid packet header if either the first header portion check or the second header portion check fails.

5   7. The method of claim 1, wherein the packet header is associated with at least one of: (i) an Internet protocol network, (ii) an asynchronous transfer mode network, and (iii) a frame relay network.

8. The method of claim 1, wherein an action identifier is stored along with the 10   first header portion and the second header portion.

9. The method of claim 1, wherein the action identifier indicates whether the associated packet should be processed or dropped.

15   10. The method of claim 1, wherein a memory unit stores an indication of the first pre-determined relationship along with the first stored pattern for the first header portion.

11. The method of claim 10, wherein the memory unit stores a plurality of pre-20   determined relationships and associated stored patterns for the first header portion.

12. The method of claim 11, wherein the memory unit further stores an indication of the number of pre-determined relationships and stored patterns that are associated with the first header portion.

13. An article, comprising:

a storage medium having stored thereon instructions that when executed by a machine result in the following:

5   identifying a first header portion and a second header portion of a packet header for an information packet,

storing the first header portion and the second header portion,

checking if the first header portion has a first pre-determined relationship to a first stored pattern associated with the first header portion, and

10   checking if the second header portion has a second pre-determined relationship to a second stored pattern associated with the second header portion.

14. The article of claim 13, wherein a plurality of pre-determined relationships and stored patterns are associated with the first header portion.

15

15. The article of claim 14, wherein the pre-determined relationships associated with the first header portion indicate that the first header portion should not equal any of the stored patterns associated with the first header portion.

20   16. The article of claim 15, wherein the stored patterns associated with the first header portion are stored in a content addressable memory unit.

17. The article of claim 16, wherein the first header portion check is performed simultaneously for all of the stored header patterns that are associated with the first

25   header portion by providing the first header portion to the content addressable memory unit.

18. An apparatus, comprising:

a first memory unit to store a first header portion and a second header portion of a packet header for an information packet; and

5   a second memory unit to store (i) a first pre-determined relationship and associated first stored pattern for the first header portion and (ii) a second pre-determined relationship and associated second stored pattern for the second header portion.

19. The apparatus of claim 18, wherein the first and second memory units

10   comprise a single device.

20. The apparatus of claim 18, wherein a plurality of stored patterns are associated with the first header portion.

15   21. The apparatus of claim 20, wherein the first header portion should not equal any of the stored patterns associated with the first header portion.

22. The apparatus of claim 21, wherein stored patterns associated with the first header portion are stored in a content addressable memory unit.

20

23. A system, comprising:

a backplane;

a first line card connected to the backplane; and

a second line card connected to the backplane, the second line card having a

25   network processor that includes:

a first memory unit to store a first header portion and a second header portion of a packet header for an information packet, and

a second memory unit to store (i) a first pre-determined relationship and associated first stored pattern for the first header portion and (ii) a second pre-determined relationship and associated second stored pattern for the second header portion.

5

24. The system of claim 23, wherein the first and second memory units comprise a single device.

10

25. The system of claim 23, wherein a plurality of stored patterns are associated with the first header portion.

26. The system of claim 25, wherein the first header portion should not equal any of the stored patterns associated with the first header portion.

15

27. The system of claim 26, wherein stored patterns associated with the first header portion are stored in a content addressable memory unit.